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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Suzanne K. Melges

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EXAMINER

KOCH, GEORGE R

ART UNIT

PAPER NUMBER

1734

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/672,016

Applicant(s)

MELGES, SUZANNE K.

Examiner

George R. Koch III

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-10 and 12-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-10 and 12-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3, 6-14, 17-18, 20-27, 28-30 and 32-36 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Pennino (US Pub 2002/0134498), and optionally further in view of Goodwin (US Patent 5,015,324) and optionally Lenthall (US 6,854,819).

Pennino discloses a food labeling device powerable by an electrical source (item 30 (ideally batteries or direct AC power - see paragraph 0037) for printing time/date information on a label strip (see paragraph 0034 and Figures 4A, 4B, and 4C) with adhesive (recited in paragraph 0038) backing for attachment to food items which is removably adhered to a backing strip formed as a label roll (see paragraph 0038), comprising:

a housing (item 20) adapted for receiving the label roll (item 40);

a controller (item 80) associated with said housing adapted for computing and outputting the time/date information in the form of control signals upon receipt of a request therefor;

at least one input device (item 70, OR items 171 and 172 in Figure 13B) associated with said housing adapted for a user to operate said controller including setting the time/date information and for submitting the request therefor;

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a display device (item 11) associated with said housing adapted for receiving the control signals from said controller and displaying the time/date information for the user to view;

a printing device (item 50) associated with said housing adapted for receiving the control signals from said controller and imprinting the time/date information on the label strip passing thereby from the label roll; and wherein said controller, input device, display device, printing device, and transport device are powered by the electrical source (the disclosed batteries or AC power - see item 30 and item 12).

Pennino does disclose that the label strip is advance in a coordinated matter with the printing of the time/date information by said printing device on the label strip.

Pennino does disclose that the device "produces" a label upon actuation. Pennino is explicitly silent to a transport device (i.e., the single action actuator and associated structure which allows for the producing of the label in paragraph 0046, for example) associated with said housing adapted for receiving the control signals from said controller, choosing to instead refer to the transport device in functional language as actions taken in conjunction with the movement and printing of the labels. Two possible interpretations are valid. One interpretation of the disclosure of Pennino is that single actuator which produces the label (which is then grasped - see paragraphs 0045 to 0047) is part of the transport device. The pressing of this actuator results in the transmission of control signals from the controller and the advancing of the label strip in a coordinated manner with the printing of the time/date information by the printing

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device on the label strip (see also paragraph 0041-0042 & 0045-0047), and therefore, Pennino discloses a transport device integrated with the printing device. Support for this can be seen in the lack of any separate advancing mechanism, and the ability of the printer to somehow produced printed labels which come out of the output slot.

The other interpretation of Pennino is that it does not disclose a transport device.

In any event, Goodwin does disclose a transport device (see Figure 1 and 6, for example) in the context of a thermal printer labeling system. Goodwin discloses that the label transport device includes a drive motor (item 162) mounted to the support frame (items 31 and 159, see Figures 4-7) and operably connected to the platen (via intermediate platen 40 and structures 41, 42, 44, 49 and 39 - see Figure 1), and is adapted to receive control signals from the controller and rotate the platen in the coordinated manner with printing by the thermal printing head on the label strip (see Figure 15). One in the art would immediately appreciate that these structures ensure that the printing matches with the label, especially when used with sensor 38 (and see Figures 13-14 and columns 10-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the transport mechanisms of Goodwin in order to ensure that the printing operation is synchronized with the label transport operation.

Pennino also discloses that the housing is of such size as to be held in hand (Figure 7B shows the device being held in hand), and defines an interior chamber divided by a center plate (visible in Figure 9 and 10 - the center plate would be the unnumbered piece which separates the cartridge chamber from the battery chamber),

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which defines a front interior chamber and a rear interior chamber. Pennino discloses that the display device is viewable through a display hole through said housing (clearly visible in Figure 9), and that each input device is accessible through input device holes through said house (also visible in Figure 9, and see Figure 13B for the double input hole configuration), and that the label strip is passable outwardly from within said housing through a label outlet slot (item 90 in all figures) which extends through the housing.

Pennino differs in that front interior chamber holds the display, input device, with an slot for the power (or electrical) source, while the rear interior chamber holds the label roll and printing/transporting device (see the discussion with respect to the transport device above). It should be noted that applicant merely discloses the position of the front and rear chambers relative to each other, and does not eliminate the embodiment of Pennino. Pennino does not disclose the location of the controller, and does not disclose placing electrical or power source in the rear interior subchamber.

However, it considered obvious to rearrange the components in the chambers in the manner claimed. Rearrangement of parts can often be obvious. MPEP 2144.04 VI C. In this case, rearrangement of the controller to be in the front interior chamber and the power source in the rear interior chamber is considered obvious. Such an arrangement would result in the same functional apparatus as in Pennino, and could arbitrarily selected by one of ordinary skill as a design criterion. Further support for the claimed orientation can be seen in Lenthall, which uses a single chamber, but clearly shows that the power source, printer/transport device and label roll are oriented away

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from the upper right corner, and the control, display and input devices are upper right corner. Thus, the prior art additionally suggests the claim orientation or collection of components. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the claim orientation of parts in chambers as an obvious rearrangement of parts selected as part of a design choice.

As to claim 3, Pennino discloses that the housing includes a battery compartment (see item 24) within the interior chamber into which the electrical source in the form of a portable electrical storage device (i.e., batteries 12) is removably inserted.

As to claim 6, Pennino discloses the controller includes a processor (see paragraph 0042, item "microcontroller") adapted for executing sequences of program instructions with a clock device (item 60) for computing the time/date information, said processor being responsive to the signals from the input device for operation thereof, ROM, which is the at least one program memory device (see paragraph 0042) for storing the sequences of program instructions, RAM, which is the at least one data memory device (see paragraph 0042) for temporarily storing data including the time/date information from said processor and data from said program memory device, said data being sent to the display device and to the printing device for controlling operation thereof.

As to claim 7, Pennino discloses ROM and RAM and thus discloses that the program memory device comprises ROM and the data memory comprises RAM (see paragraph 0042)

As to claim 8, Pennino discloses that the display device can be a liquid crystal display (i.e., LCD display, paragraph 0043, line 5).

As to claim 9, Pennino discloses that the housing can include at least one mounting device affixed to a rear portion of the housing adapted for mounting the food-labeling device to a mounting surface (see Figure 14A and paragraph 0057, which discloses magnets, i.e., magnetic strips).

As to claim 10, Pennino discloses that the mounting devices comprise magnets affixed adapted for removably magnetically mounting the food labeling device to mounting surfaces made of ferrous metal).

As to claim 12, Pennino discloses that the front portion of the housing includes a label roll receiving hole (see Figure 10) sized for insertion of the label roll (item 100) into said interior chamber, and said housing having a label roll support (Fingers visible in Figure 10) adapted for positioning and rotatably supporting the label roll within the interior chamber. Pennino does not disclose that the hole is in the front portion of the housing. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a hole in the rear portion of housing as an equivalent engineering design choice which would have been functionally identical to a front hole. One in the art would immediately appreciate that either option, or even a

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side label roll receiving hole along the periphery of the frame, would be within the skill of one in the art and would ensure functionality. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have placed the label roll receiving hole in the rear portion of the housing as an engineering design choice.

As to claim 13, Pennino discloses that the label roll receiving hole is substantially rectangular in shape with a finger receiving portion (shown in Figure 10) which extends radially therefrom adapted to facilitate removal of the label roll from the interior chamber.

However, it would have been obvious to one of ordinary skill in the art to have substitute a circular hole for a rectangular hole. One in the art would immediately appreciate that any reasonable hole shape to cartridge/roll shape could be used, so long as the shape of the hole is dimensioned to both receive the roll or cartridge, and dimensioned to support the roll or cartridge. Such a shape design is an engineering design choice which would be selected to achieve desired benefits of support and usability. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a circular hole shape in lieu of the rectangular hole shape of Pennino as an engineering design choice.

As to claim 14, Pennino discloses that the label roll receiving hole is defined by an interior wall which extends forwardly from the rear portion to define a label roll receiving chamber of the interior chamber (see Figure 10).

As to claim 17, Pennino discloses that the input devices include an actuator switch to initiate label printing and at least one time/date set switch for setting the time/date information of the controller (see claim 25 which recites this embodiment).

As to claim 18, Pennino discloses that the switches are push button types (see paragraph 0041).

As to claim 20, Pennino discloses a printing device. However, Pennino is silent as to the type of printing device used. One in the art would appreciate that any conventional printing device could be used.

Goodwin discloses such a conventional thermal printer and labeling device wherein the printing device is a thermal printing device (see abstract, item 45) for printing on thermal printable label strips. These thermal printing devices eliminate the need for costly ink supplies. Therefore, it would have been obvious to one of ordinary skill in the art to use the thermal printing device of Goodwin as any conventionally used printing device for Pennino in order to achieve printing capability without using ink supplies.

As to claim 21, Goodwin as incorporated in claim 20 above further discloses that the thermal printing device includes a support frame (for example, item 31, and other structures), a thermal printing head fixedly mounted to the support frame (item 45), and a cylindrical platen (item 46') rotationally mounted to said support frame closely adjacent said thermal printing head to frictionally engage the label strip (and see column 9, lines 31 to column 10, line 19).

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As to claim 22, Goodwin as incorporated in claim 1 for the transport device discloses that the label transport device includes a drive motor (item 162) mounted to the support frame (items 31 and 159, see Figures 4-7) and operably connected to the platen (via intermediate platen 40 and structures 41, 42, 44, 49 and 39 - see Figure 1), and is adapted to receive control signals from the controller and rotate the platen in the coordinated manner with printing by the thermal printing head on the label strip (see Figure 15). One in the art would immediately appreciate that these structures ensure that the printing matches with the label, especially when used with sensor 38 (and see Figures 13-14 and columns 10-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the transport mechanisms of Goodwin in order to ensure that the printing operation is synchronized with the label transport operation.

As to claim 23, Goodwin as applied in claim 22 above discloses that the drive motor is operably connected to the platen through a plurality of gears (see items 172, 174, and 175).

As to claims 24, Goodwin as applied to claim 22 above discloses that the drive motor (item 162) is an electric stepping motor (see column 8, line 44 and Figure 15, which disclose that the motor is electric, and stepping, respectively).

As to claim 25, Goodwin discloses a gear connected to the motor (item 170, and see column 8, lines 40-63). This gear connection is a gear box.

As to claim 26, Pennino (see paragraph 0038) discloses that the controller can be adapted for printing label strips comprised of a plurality of individual labels with

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adhesive backing which are removably adhered in a linear spaced manner to the backing strip. Pennino does not disclose a position sensor adapted to sense positioning of the label strip by detecting a plurality of markers on the label strip disposed at substantially equally spaced positions for determining position of the individual labels relative to the printing device.

However, Goodwin discloses a position sensor (item 38) adapted to sense positioning of the label strip by detecting a plurality of markers (item 37, see Figures 13 and 14) on the label strip disposed at substantially equally spaced positions for determining position of the individual labels relative to the printing device, and wherein the controller is adapted for printing label strips comprised of a plurality of individual labels with adhesive backing which are removably adhered in a linear spaced manner (see Figures 13 and 14) to the backing strip (and see column 8, line 64 to column 9, line 22). One in the art would immediately appreciate that these sensor and mark structures ensure that the printing matches with the label, especially when used with the printing and transport devices (and see Figures 4-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the sensor mechanisms of Goodwin in order to ensure that the printing operation is synchronized with the label transport operation.

As to claim 27, Goodwin as incorporated in claim 26 above further discloses that the position sensor is adapted to detect markers of the printed indicia type, which are solid marks (see column 4, lines 2-8).

As to claim 28, Pennino discloses that the housing can include a cutting blade mounted thereto having a cutting edge disposed immediately adjacent the label outlet slot (item 91, and see paragraph 0044).

3. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pennino and Goodwin and optionally Lenthall as applied to claim 17 above, and further in view of Richardson (US Patent 5,111,216).

As to claim 19, Pennino, or Pennino and Goodwin, do not disclose a power switch. Pennino, alone or with Goodwin, is silent as to whether there is or is not a power switch.

Richardson discloses a thermal printer and labeling device with a power switch (see column 5, line 14). One in the art would immediately appreciate that using a power switch would allow for the device to be powered down, conserving power usage. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a power switch as disclosed in order to enable the device to be deactivated, thus conserving power usage.

4. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable Pennino and Goodwin and optionally Lenthall as applied to claim 2 above, and further in view of Ichikawa (US patent 5,363,227).

Pennino (or Pennino and Goodwin) makes obvious all of the limitations of claims 1 and 2 above, including a display.

Pennino does not disclose a transparent protector plate disposed over the display device.

Ichikawa discloses a transparent protector plate (item 15, transparent) disposed over the display device. While Ichikawa is not in the field of labeling devices, Ichikawa is reasonably pertinent to the problem on hand, which is the protection of display panels in personal electronic devices. Ichikawa discloses that the addition of a transparent protector plate improved the durability of the panel and prevents damage (see columns 5-8, especially column 7, line 64 to column 8, line 21). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a transparent protective plate in order to prevent damage to the underlying display device.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable Pennino and Goodwin and optionally Lenthall as applied to claim 7 above, and further in view of Horowitz and Hill (pages 501-504).

Pennino (or Pennino and Goodwin) discloses all of the structure in claims 1 and 6. As to claim 7, Pennino also discloses one of the species of program memory devices (ROM), and the data memory (RAM).

However, Pennino does not disclose the other species of program memory device, which is PROM (programmable read only memory). Horowitz and Hill disclose that both ROM and PROM are useful since they are non-volatile, meaning that the

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stored information is retained even when the power is removed, which is useful for storing programs. Furthermore, Horowitz and Hill disclose that PROM's are essentially identical to ROM, with the additional benefit of being programmable. Thus, one in the art would appreciate that software in a PROM could be updated, i.e., reprogrammed, by the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized PROM in lieu of ROM in order to ensure that the stored program could be updated.

6. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable and Goodwin and optionally Lenthall as applied to claim 12 above, and further in view of Mistyurik (US patent 4,668,326).

Pennino as applied to claim 1, and 11, either alone or with Goodwin, discloses that the housing is adapted to receive the label roll with the interior chamber (see Figure 3). Furthermore, Pennino or Pennino and Godwin make obvious the details of claim 12.

As to claim 15, Pennino does not disclose that the label roll support includes at least one resiliently flexible arm which extends inwardly into the label roll receiving hole from the rear portion of the housing terminating at a central disk with a centering post which extends forwardly therefrom to fit within a tubular core of the label roll.

Rather, Pennino uses a one piece frame construction.

However, Mistyurik discloses that the label roll support includes at least one resiliently flexible arm (as part of item 24) which extends inwardly into the label roll receiving hole (towards element 26) from the rear portion of the housing terminating at a

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central disk (item 49) with a centering post which extends forwardly therefrom to fit within a tubular core of the label roll. Furthermore, as to claim 16, Mistyurik discloses that there are two flexible arms (on both sides of element 49). Mistyurik discloses that this setup facilitates loading and unloading of the label supply (see column 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such an arm and holder structure as in Mistyurik in order to facilitate loading and unloading of the label supply.

7. Claims 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pennino and Goodwin and optionally Lenthall as applied to claims 27 above, and further in view of Takizawa (US Patent 6,085,818).

Pennino or Pennino and Goodwin as applied to claims 27 above disclose the species wherein the position sensor is adapted to detect printed indicia. Pennino or Pennino and Goodwin as applied does not suggest detecting perforations.

However, Takizawa discloses in label application systems that it is known to detect perforations in the labels for identifying wherein the printed labels are located (see column 3, lines 22-37). One in the art would immediately appreciate that such a system is functionally equivalent to detecting printed indicia, and also has the added benefit of being the actual start/end of the labels, thus avoiding the possibility of the marks themselves being incorrect. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such perforations as

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the sensed condition in order to achieve an accurate and precise identification of the location of the label.

Response to Arguments

8. Applicant's arguments filed 8/4/2006 have been fully considered but they are not persuasive.

9. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant implicitly relies upon (i.e., that the rear and front chambers are oriented in the manner of the drawings) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Since Pennino discloses two side by side portions, one side can be considered to the rear of the other, should a side be presented to the front. It should be noted that applicant's claims do not specify where the various holes for the display, input devices and outlets should be positioned relative to the front and rear areas.

In any event, positioning the chambers into the manner claimed is considered obvious for the same reason noted above. MPEP 2144.04 VI C.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and giving the operator the above TDD number. The examiner can normally be reached on M-Th 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George R. Koch III
Primary Examiner
Art Unit 1734

GRK
3/1/2007